

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-164-EA

CASEFILE/PROJECT NUMBER: new COC69038

PROJECT NAME: Pipeline Snow Grove Mesa to Baxter Pass

LEGAL DESCRIPTION: Sixth Principal Meridian
T.5S. R.103W

Sec. 29, SW $\frac{1}{4}$ SW $\frac{1}{4}$,

Sec. 30, N $\frac{1}{2}$ SE $\frac{1}{4}$,

Sec. 32, SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$,

Sec. 33, S $\frac{1}{2}$,

Sec. 34, SW $\frac{1}{4}$ NW $\frac{1}{4}$.

APPLICANT: Canyon Gas Resources (hereafter Canyon)

ISSUES AND CONCERNS: The proposal was sent to White River Field Office (WRFO) and Grand Junction Field Office (GJFO) as one project. After discussion, it was decided to separate the project into two actions; the Snow Grove connection to an existing Canyon pipeline near Baxter Pass, on lands primarily administered by WRFO, and the extension/possible replacement of an existing pipeline, located on lands administered by GJFO. In addition, agreement with private land owners will be necessary for the project to proceed.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: Canyon proposes multiple projects to construct, operate, and maintain approx. 7.8 miles new and existing pipeline of up to 12 inches with related facilities including pigging facilities and other above ground facilities. Part of the route will be on private lands. Canyon has determined that the pipeline to Snow Grove Mesa will require a 3 inch line.

Proposed Action: Canyon is requesting authorization for (Snow Grove connection) a new buried pipeline on public lands administered by WRFO with short portions crossing public lands administered by the GJFO. The pipeline loop will expand Canyon's existing gathering system in the area to accommodate production from the CDX Snow Grove Mesa 30-5-103 well as well as new drilling in the area. Construction of the pipelines will allow for production of high inert gas by creating a transportation route to deliver the gas to the Badger Wash Plant.

The proposed route initially followed the existing road but has been changed to follow the existing fence lines between private land and BLM grazing pastures at the request of the private land owners and concurrence of BLM. The route is the shortest considered, follows existing disturbances, and connects a producing well which is on federal lands. The survey in the field followed this fence line route (as shown on map in Exhibit A).

Since the required pipeline to Snow Grove Mesa will be 3" diameter, Canyon has agreed that the ROW will be 35 feet permanent, with an additional 15 feet of work space. Road crossings, foreign line crossings, and steep areas may require additional work space and will be identified in advance. The facility will be used year around and a 30 year term is requested. Canyon wishes to construct in late summer/ fall of 2005. Construction for the combined projects will take approximately 3 months. Distances are:

BLM, White River Field Office	– 7869 feet
BLM Grand Junction Field Office	– 3350 feet
Private lands (Hill)	– 6152 feet

The route on BLM will be 11,219 feet, with a permanent authorized area of 9.014 acres, more or less, with an additional 3.863 acres, more or less, for the temporary construction area.

No Action Alternative: The pipelines will not be authorized or constructed.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: The original plan was to follow the existing road. At the request of the private land owner, and the concurrence of the range management and forestry specialist for the area, the route was changed to the existing grazing allotment fenceline.

NEED FOR THE ACTION: Canyon requests this pipeline loop to expand their existing gathering system in the area to accommodate new drilling and production. These pipelines will allow for production of high inert gas by creating transportation routes to the Badger Wash Plant.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Pages 2-49 thru 2-52

Decision Language: "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The proposed actions are not located within a thirty mile radius of any special designation air sheds or non-attainment areas.

Environmental Consequences of the Proposed Action: Exhaust from construction equipment will increase nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and carbon monoxide (CO) levels which can deteriorate air quality. Dry periods combined with gusty winds will temporarily increase fugitive dust levels, also reducing local air quality. However, given the short duration for construction of the proposed pipeline, no significant air quality concerns are anticipated.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations as well as provide documentation to the BLM that they have done so prior to construction.

All stockpiled soils will be wetted to mitigate production of fugitive dust. Surfaces disturbed during construction will be promptly revegetated. Adequate ground cover (e.g. woody debris) must be applied immediately to minimize surface exposure to eolian processes.

CULTURAL RESOURCES

Affected Environment: The proposed pipeline route has been inventoried at the Class III (100% pedestrian) level (Conner 2005, Compliance Dated 9/23/2005) with no cultural resources identified along the proposed pipeline route.

Environmental Consequences of the Proposed Action: It does not appear that the proposed pipeline will impact any known cultural resources.

Environmental Consequences of the No Action Alternative: There would be no new impacts to cultural resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Noxious weeds known to occur in the project area are houndstongue, burdock, musk thistle and Canada thistle. The grazing permittee has been actively controlling noxious weeds and has significantly decreased the infested acres. The invasive annual cheatgrass is also found throughout the area, primarily associated with unvegetated earthen disturbance adjacent to roads and pipelines.

Environmental Consequences of the Proposed Action: The proposed action will create about 14 acres of new earthen disturbance which will provide safe sites for the establishment and proliferation of noxious and invasive species. The proposed mitigation will reduce but not eliminate this negative impact. The proposed seed mix contains non-native species which have not been shown to interbreed with native species or to move off-site.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: The operator will be required to monitor the project site(s) for a minimum of three years post-construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.

MIGRATORY BIRDS

Affected Environment: A number of migratory birds fulfill nesting functions in the project area from mid May through early August. Habitats that would be influenced by the proposed action are predominantly dry exposure sagebrush and mesic mountain shrub. Although the pipeline route would intersect about 1400 feet of woodland communities (5 stands of aspen; mean length 280', range 100-500 feet), the ridgeline right-of-way would remain on the uphill margin of stands that are characterized by one or more of the following features: open-canopied, narrow (about 100' width), or composed primarily of regeneration (from previous fence-building disturbance). The Rocky Mountain Bird Observatory, in cooperation with BLM, has developed a list of migratory birds of higher conservation interest that are largely obligate to specific habitat types on the Colorado Plateau. Those birds relevant to the project area include Brewer's sparrow, green-tailed towhee, and Virginia's warbler for the sagebrush and mixed shrub types, and purple martin, violet-green swallow and Williamson's and red-naped sapsucker for the aspen woodlands.

This action is located along an existing fenceline corridor that is paralleled by a 2-track. This corridor is likely used sparingly during the spring through mid-summer months, but because access to adjacent federal lands is allowed along the fenceline on private lands (i.e., western half of project), big game hunting use is regular from mid-August through November

Environmental Consequences of the Proposed Action: This action is scheduled to take place during the fall of 2005 and would have no influence on migratory bird nesting activity. In the event the project were delayed, it is unlikely that migratory bird nesting activity would be subjected to substantive levels of impact. Corridor clearing would involve the margin of narrow stands of younger age-class aspen along an open ridgeline crest, and as such, these stands and/or trees are poorly suited nest substrate for cavity dwelling species, aspen obligates, and raptors. Further, because the proposed right-of-way generally follows the interface between sagebrush and deciduous browse stands, respective shrubland species would not be apt to nest in close proximity or at high densities along a stand edge—particularly along a 2-track road and cleared fenceline with lesser vegetation density.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would influence migratory bird nesting activity.

Mitigation: None, but see under Aquatic Wildlife section.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no-action alternative.

Mitigation: The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed pipeline is located on the drainage divide between the White River Basin (to the north) and the Lower Colorado River Basin (to the south). The affected watersheds in the White River Basin area as follows: West Evacuation Creek, East Fork Saw Mill Creek, Middle Fork Saw Mill Creek, South Fork Saw Mill Creek, Trail Canyon, Whiskey Creek and Bitter Creek. The only affected watershed in the Lower Colorado River Basin is West Salt Creek.

All of the affected watersheds in the White River Basin are situated within stream segment 22. Stream segment 22 of the White River Basin is comprised of all tributaries to the White River, including all wetlands, lakes and reservoirs, from a point immediately above the confluence with Douglas Creek to the Colorado/Utah boarder, except for specific listings in segment 23. No designated segment number has been given to those tributaries that originate in Colorado but empty into the White River in Utah. These watersheds share the same water quality parameters as those stream segments in 22 and thus will be grouped with them in this document.

West Salt Creek is located in stream segment 13b of the Lower Colorado River Basin. Stream segment 13b of the Lower Colorado River Basin consists of all tributaries to the Colorado River, including wetlands, from the Government Highline Canal Diversion to a point immediately below Salt Creek, down gradient from the Government Highline Canal, the Orchard Mesa Canal No. 2, Orchard Mesa Drain, Stub Ditch and the northeast Colorado National Monument boundary, except for specific listings in segment 13c.

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the White River ROD/RMP was done to see if any water quality concerns have been identified. The State has classified stream segment 22 of the White River Basin and stream segment 13b of the Lower Colorado River Basin as "Use Protected" and further designated as beneficial for the following uses: Warm Aquatic Life 2, Recreation 1b (Recreation 1a for segment 13b), and Agriculture. The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For segment 22, minimum standards for four parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 325/100 ml, and 205/100 ml E. coli. For segment 13b, minimum standards for four parameters have also been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 200/100 ml, and 125/100 ml E. coli.

Ground Water: The proposed pipeline will be constructed high in the drainage basin in an area of groundwater recharge. Ground water recharging at this location will be recharging aquifers critical for maintaining base flows in the affected streams.

Environmental Consequences of the Proposed Action: Construction of the pipeline will result in temporary exposure of soils to erosional processes. Heavy equipment used during construction combined with the removal of ground cover will increase erosive potential due to runoff (overland flows) and raindrop impact during storm events. Elevated erosion rates in the upland portions of the affected watersheds will result in increased sedimentation down stream adversely impacting stream channel morphology.

Local ground water will be vulnerable to contamination if a spill or leak results from the pipeline or construction equipment.

Environmental Consequences of the No Action Alternative: None

Mitigation: All surfaces disturbed during construction will be promptly revegetated and adequate ground cover must be immediately applied to minimize erosion. The use of biodegradable fabric (e.g. jute) may be necessary to stabilize certain areas highly susceptible to erosion.

To mitigate contamination of local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils.

Finding on the Public Land Health Standard for water quality: Following suggested mitigation measures, water quality will remain unchanged from current conditions which is currently meeting state standards.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No ACEC's, flood plains, prime and unique farmlands, wetland and riparian zones, Wild and Scenic Rivers, or threatened, endangered or sensitive plants or animals exist within the area affected by the proposed action. For threatened, endangered and sensitive plant and animals, Public Land Health Standards are not applicable since neither the proposed nor the no-action alternative would have any influence on populations of, or habitats potentially occupied by, special status species. There are also no Native American religious or environmental justice concerns associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The proposed actions will not encounter any fragile soils. However, portions of the proposed pipeline (SW ¼ of Section 33, and SE ¼ of NE ¼ section 33) are situated near areas of No Surface Occupancy (NSO) which are prone to mass wasting.

The following data is a product of an order III soil survey conducted by the Natural Resource Conservation Service (NRCS) in Garfield County, CO. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

Soil Number	Soil Name	Slope	Ecological site	Salinity	Run Off	Erosion Potential	Bedrock
9	Bookcliff-Utso, cool, complex	3-25%	Mountain Loam ecological site #228.	<2	Medium	Moderate to very severe	40-60
13	Caballo very channery loam	40-80%	Rocky Mountain Douglas-Fir ecological site	<2	Rapid	very severe	44
17	Cathedral-Veatch complex	25-85%	Mountain Pinyon ecological site #448. Brushy Loam ecological site #238	4-16	Medium	very severe	11-32
47	Hesperus-Empedrado, moist-Pagoda complex	5-35%	Brushy Loam ecological site #238.	<2	Medium to Rapid	Moderate to very severe	>60

9 – *Bookcliff-Utso, cool, complex* (3 to 25 percent slopes) is located on ridges and shoulders. The native vegetation is mainly shrubs and grasses with a scattering of Rocky Mountain Douglas-fir, two needle pinyon, and Rocky Mountain juniper.

The Bookcliff soil is deep and well drained. It formed in residuum derived dominantly from calcareous sandstone. Typically, the surface layer is dark grayish brown loam about 2 inches

thick. The upper 16 inches of the subsoil is brown loam. The next 18 inches is pale brown gravelly loam. Below this is very pale brown cobbly loam about 6 inches thick. The lower part of the subsoil to a depth of 60 inches or more is pale brown very cobbly loam. Permeability is moderately slow in the Bookcliff soil. The available water capacity is moderate. The effective rooting depth is 60 inches or more. Runoff is medium, and the hazard of water erosion is moderate to very severe.

The Utso soil is deep and well drained. It formed in colluvium and residuum derived dominantly from sandstone or shale. Typically, the upper 4 inches of the surface layer is very dark grayish brown channery loam. The lower 7 inches is dark grayish brown very channery loam. The subsoil to a depth of 60 inches or more is grayish brown very channery loam. Highly fractured, hard, platy shale commonly occurs at a depth of 40 to 60 inches. Permeability is moderate in the Utso soil. The available water capacity is low. The effective rooting depth is 40 to 60 inches. Runoff is medium, and the hazard of water erosion is moderate to very severe.

13 - Caballo very channery loam (40 to 80 percent slopes) is a deep, well drained soil found on side slopes. It formed in colluvium and residuum derived dominantly from mixed sedimentary rocks. The native vegetation is mainly Rocky Mountain Douglas-fir, shrubs, grasses, and forbs. Typically, the surface layer is dark brown very channery loam about 6 inches thick. The upper 12 inches of the subsoil is dark brown very channery loam. The lower 18 inches of the subsoil is brown extremely channery loam. The substratum is pale brown extremely channery loam about 8 inches thick. Weathered bedrock is at a depth of about 44 inches. Permeability is moderate in the Caballo soil. The available water capacity is very low. Runoff is rapid, and the hazard of water erosion is very severe.

17 – Cathedral-Veatch complex (25 to 85 percent slopes) can be found on mountain slopes and benches. The native vegetation is mainly shrubs, forbs, and grasses.

The Cathedral soil is shallow and well drained. It formed in residuum derived dominantly from sandstone. Slope ranges from 25 to 85 percent. Typically, the surface is covered with a mat of leaves about 1 inch thick. The surface layer is dark grayish brown very stony sandy loam about 5 inches thick. The subsoil is grayish brown very gravelly sandy loam about 6 inches thick. Hard sandstone is at a depth of about 11 inches. Permeability is moderate in the Cathedral soil. The available water capacity is very low. The effective rooting depth is 8 to 20 inches. Runoff is medium, and the hazard of water erosion is very severe.

The Veatch soil is moderately deep and is well drained. It formed in residuum derived dominantly from sandstone. Slope ranges from 25 to 50 percent. Typically, the surface layer is dark grayish brown loam about 6 inches thick. The upper part of the subsoil also is dark grayish brown loam. It is about 5 inches thick. Below this is a 21 inches of pale brown very channery sandy loam. Sandstone is at a depth of about 32 inches. Permeability is moderate in the Veatch soil. The available water capacity is low. The effective rooting depth is 20 to 40 inches. Runoff is medium, and the hazard of water erosion is very severe.

47 – Hesperus-Empedrado, moist-Pagoda complex (5 to 35 percent slopes) is found on mountainside and benches. The native vegetation is mainly shrubs, forbs, and grasses.

The Hesperus soil is deep and well drained. It formed in residuum derived dominantly from sandstone and shale. Typically, the surface layer is very dark gray and dark grayish brown loam about 7 inches thick. The subsoil is brown clay loam about 17 inches thick. The upper part of the substratum is dark yellowish brown clay loam about 13 inches thick. The lower part to a depth of 60 inches or more is brown clay loam. Permeability is moderately slow in the Hesperus soil. The available water capacity is high. The effective rooting depth is 60 inches or more. Runoff is medium or rapid, and the hazard of water erosion is moderate to very severe.

The Empedrado soil is deep and well drained. It formed in residuum and colluvium derived dominantly from interbedded sandstone and shale. Typically, the surface layer is dark grayish brown loam about 10 inches thick. The upper part of the subsoil is yellowish brown clay loam about 11 inches thick. The next part is light olive brown gravelly sandy clay loam about 7 inches thick. The lower part of the subsoil to a depth of 60 inches or more is yellowish brown and pale brown loam. Permeability is moderate in the Empedrado soil. The available water capacity also is moderate. The effective rooting depth is 60 inches or more. Runoff is rapid, and the hazard of water erosion is very severe.

The Pagoda soil is deep and well drainage. It formed in colluvium derived dominantly from shale. Typically, the surface layer is dark grayish brown clay loam about 6 inches thick. The upper part of the subsoil is dark brown clay loam about 11 inches thick. The next part is brown clay about 23 inches thick. The lower part of the subsoil to a depth of 60 inches or more is brown clay loam. Permeability is slow in the Pagoda soil. The available water capacity is moderate. The effective rooting depth is 60 inches or more. Runoff is medium or rapid, and the hazard of water erosion is severe or very severe.

Environmental Consequences of the Proposed Action: Construction of the proposed pipeline will decrease ground cover leaving soils exposed to erosional processes. Accelerated erosion rates will occur along disturbed areas if proper mitigation measures are not followed.

Portions of the pipeline are in close proximity to No Surface Occupancy (NSO) areas which may be threatened if mass wasting occurs. Slope failure may cause the pipeline to rupture exposing soils, water, and air to contaminants.

Environmental Consequences of the No Action Alternative: None

Mitigation: Comply with “Gold Book” surface operating standards for constructing the pipeline, available in the White River Field Office upon request. Flow deflectors and sediment traps (woody debris) must also be utilized in attempts to mitigate erosive potential of overland flows. The use of biodegradable fabric (e.g. jute) may be necessary to stabilize certain areas highly susceptible to erosion (e.g. locations close to NSO areas). All stockpiled soils associated with pipeline construction must be wetted to minimize soil loss.

Finding on the Public Land Health Standard for upland soils: At the present time, soils in the vicinity of the proposed action exhibit infiltration and permeability rates that are appropriate to soil type, landform, climate, and geologic processes. The proposed actions will cause

decreases in both infiltration and permeability rates due to soil compaction and loss of vegetal cover. However, with proper mitigation soil health will continue to meet standards set by the state.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Vegetation at the proposed pipeline is dominated by mountain big sagebrush (*Artemisia tridentata ssp. vaseyana*) with an admixture of Utah serviceberry, snowberry, Gambel oak and a diverse understory of native grasses and forbs. The associated range site is Mountain Loam/Loamy slopes. The sites are in a mid seral ecological state. At the top of the ridge there is a stand of old Douglas-Fir that was partially harvested illegally in 1994. The pipeline also is adjacent to an aspen stand.

Environmental Consequences of the Proposed Action: The principal impact to vegetation will be complete removal of vegetation on the pipeline and the earthen disturbance associated with it. In terms of plant community composition, structure and function, the principal negative impact over the long term would occur if invasive species or noxious weeds are allowed to establish and proliferate on the disturbed areas resulting from pad and access road construction. Following the mitigation for noxious weed control the opportunity for seeded species and invasion by the native plant communities would be increased.

Environmental Consequences of the No Action Alternative: There will be no change from the present situation.

Mitigation: Revegetation shall include all cut and fill slopes associated with pipeline construction. Successful revegetation should be achieved within three years. The following seed mix will be used for this project.

Seed Mix #	Species (Variety)	Lbs PLS/ Acre	Ecological Sites
6	Basin wildrye (Magnar)	2	Foothill Swale, Sandy Swale, Swale Meadow
	Western wheatgrass (Rosanna)	3	
	Pubescent wheatgrass (Luna)	3	
	Orchardgrass (Paiute)	1	

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial):): Most of the public land plant communities within the area of the proposed action have an appropriate age structure and diversity of species which meet the criteria established in the standard for vegetation. With successful reclamation, the proposed action would not change this status.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The nearest aquatic habitat, consisting of private livestock ponds in the Bitter Creek drainage, is separated from the project by more than 2000 lateral feet and 300

vertical feet. The nearest BLM-administered channel supporting aquatic life (i.e., brook trout) is greater than 1 mile downstream from these sites.

Environmental Consequences of the Proposed Action: The proposed action is situated on relatively level terrain along an existing facility corridor and would present no special reclamation problems or concerns. Particularly because the project area is composed of productive, higher elevation sites, is relatively distant from nearest habitats, and project construction is governed by best management practices that minimize the extent and duration of soil disturbance and loss, there is no reasonable probability that the project would have any effective influence (e.g., sediment discharge) on subtending stream or lentic habitats.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any influence on aquatic habitat.

Mitigation: none

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): The nearest aquatic habitat in Bitter Creek generally meets the Public Land Health Standard. Similar to the no-action alternative, pipeline construction and operation, as proposed and conditioned, would have no effective influence on these habitats or the continued achievement of the land health standard.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The project site is encompassed by big game summer ranges that are categorized as critical habitats by the Colorado Division of Wildlife. Because the pipeline corridor is situated along an exposed and relatively xeric ridgeline and parallels an existing cleared fenceline corridor and 2-track, no special habitat features (e.g., forage or cover values) are involved.

Woodland habitats along the proposed corridor are poorly suited as raptor nest substrate (i.e., small diameter aspen, ridgeline exposure, margin of thinly canopied and narrow width stands, parallel existing 2-track). Nongame birds and mammals associated with these habitats are widely represented and typical of each habitat. There are no narrowly endemic or rare species, nor are there obvious deficiencies in the composition of these populations.

Environmental Consequences of the Proposed Action: The proposed action is scheduled to take place in late summer or through the fall months. By this time, all sensitive reproductive functions of big game are complete and activity associated with the annual big game hunting seasons has commenced. Because pipeline construction activity is relatively short-term and transient, the proposed action would have no substantive influence on big game distribution or activity patterns. Although access to forage resources is likely hampered during the later summer and fall months by road activity, reductions in the herbaceous forage base (most pertinent on summer ranges) from corridor clearing would be temporary and quickly compensated through successful reclamation.

Due to the paucity of suitable substrate and very low probability of raptor nest activity occurring in close proximity to this corridor, there is no practical need to perform woodland raptor nest inventories prior to construction.

Temporary vegetation clearing attributable to pipeline construction would have no effective influence on nongame bird or mammal abundance or distribution. Because of past fenceline clearing and 2-track development, the subsequent herbaceous character of the site would not be dramatically altered from existing conditions. At these elevations, it is unlikely that narrow linear corridors with strong ground cover development hinders or acts as a barrier to small mammal movements.

Environmental Consequences of the No Action Alternative: There would be no action authorized that would have any influence on terrestrial habitat or seasonal animal use.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The land health standard for animal communities is currently being met across the Douglas basin's higher elevation communities. The proposed action represents a temporary disruption that would have no lasting consequence on resident wildlife populations, habitat conditions, or current land uses and would not, therefore, interfere with continued meeting of the standard. Similarly, the no-action alternative would have no effective influence on continued meeting of the standard.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management			X
Forest Management		X	
Geology and Minerals	X		
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics		X	
Visual Resources			X

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: Garfield County road 268 and 201 will be affected by this action as well as unnamed unnumbered BLM routes west of Baxter Pass. Area surrounding proposed action is open seasonally to motorized cross-country travel from May 1 to September 30. Motorized travel is limited to existing routes the remainder of the year.

Environmental Consequences of the Proposed Action: A new route will likely be created by widening existing fence line right-of-way. It is likely that hunters and other recreationists will utilize this pipeline route to access public lands to the west of Baxter Pass.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Sign pipeline as “closed to motor vehicle traffic” after completion where pipeline leaves Baxter Pass.

FIRE MANAGEMENT

Affected Environment: The proposed pipeline involves approximately 1.16 miles of pipeline construction from the Baxter Pass road up to the mesa top where the line transitions into a sagebrush park in the SESE of section 32 for an approximate total of 10.5 acres of disturbance in (moderate 5-9 tons/acre) mixed conifer and aspen fuel type in numerous stands along the pipeline route this does account for both the permanent ROW and the temporary work space.

Due to the existing tree cover of Douglas fir, spruce and aspen there will be a need for the operator to clear these trees. If not adequately treated, these trees will result in elevated hazardous fuels conditions and remain on-site for many years. These accumulations of dead material are very receptive to fire brands and spotting from wind driven fires and can greatly accelerate the rate of spread of the fire front.

The National Fire Plan calls for “firefighter and public safety” to be the highest priority for all fire management activities. In the pinion, juniper, and brush types common on the White River Resource Area, roads and other man-made openings are commonly used as fuel breaks or barriers to control the spread of both wildland and prescribed fires. By reducing the activity fuels created from this proposal, future fire management efforts in this area should be safer for those involved and more effective.

Environmental Consequences of the Proposed Action: There will be approximately 10.5 acres of pipeline construction requiring the removal of mixed conifer and aspen fuel type for the pipeline. If not treated the slash and woody debris will create an elevated hazardous dead fuel

loading on the ridge top where lightning most commonly strikes which could pose significant control problems due to the timber and mountain brush fuel loading to the north and north east in the event of a wildfire which could elevate the possibility for large fire growth. Additionally there would be greater threat to public, industry personnel, and fire suppression personnel.

Environmental Consequences of the No Action Alternative: There would be no tree removal or disturbance which would cause significant dead fuel loading.

Mitigation: Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively breakdown the woody fuel and scatter the debris thereby eliminating any hazardous fuel load along the road and pipeline right-of-way. The other option would be to cut trees and have them chipped and scattered on the right-of-way after seeding of the disturbed areas.

PALEONTOLOGY

Affected Environment: The proposed pipeline route has been inventoried for fossil resources at the Class III (100% pedestrian) level (Young 2005, Compliance Dated 9/23/2005). No vertebrate fossils were identified though stromatolites and other invertebrates were identified.

Environmental Consequences of the Proposed Action: It is possible that during trench excavation that some scientifically important fossil could be impacted though the probability is somewhat low.

Environmental Consequences of the No Action Alternative: There would be no new impacts to fossil resources under the No Action Alternative.

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator

will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

RANGELAND MANAGEMENT

Affected Environment: The proposed pipeline is within the Evacuation Creek allotment which is permitted to the Cripple Cowboy Cow Outfit. The ranching operation is a cow/calf operation which uses public lands throughout the year. The project area is used during the summer. The fence of which the pipeline would follow is a pasture fence which contains livestock within the Atchee pasture.

Environmental Consequences of the Proposed Action: If the project takes place during a period that livestock are not in the area there are not expected to be any impacts. If construction takes place when livestock are present and the fence is not usable there are expected to be problems with containing livestock. There is also the opportunity for livestock to fall into the trench.

Environmental Consequences of the No Action Alternative: There would be no change from the existing situation.

Mitigation: The operator is responsible for maintaining the integrity of the fence when livestock are present and to repair the fence to a usable standard. The operator is to minimize open trench when livestock are present and to provide livestock crossings.

REALTY AUTHORIZATIONS

Affected Environment: The pipeline route follows an existing grazing allotment fence administered by the White River Field Office. It is located in Garfield County and crosses lands administered by the White River FO and the Grand Junction FO and private lands.

Environmental Consequences of the Proposed Action: Both offices have agreed that the authorization will be issued by the White River FO. Canyon's existing ROW grant COC012469 cannot be amended, so authorization will be a new grant serialized as COC69038.

Environmental Consequences of the No Action Alternative: The pipeline would not be approved and there would be no additional impacts.

Mitigation:

1. Canyon must reach an agreement with the private land owner(s) involved.
2. Colorado One Call procedure must be initiated before earth moving activities begin.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The project area most resembles a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). SPM physical and social recreation setting is typically characterized by a natural appearing environment with few administrative controls, low interaction between users but evidence of other users may be present. SPM recreation experience is characterized by a high probability of isolation from the sights and sounds of humans that offers an environment that offers challenge and risk.

Environmental Consequences of the Proposed Action: If construction coincides with hunting seasons (September through November) it will most likely disrupt the experience sought by those recreationists.

With the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: No loss of dispersed recreation potential and no impact to hunting recreationists.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: The proposed action would be located in an area with a VRM II classification. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Environmental Consequences of the Proposed Action: The proposed action would parallel existing linear disturbance. The increased size of the linear disturbance could be seen by a casual observer, but should not attract any more attention than the existing disturbance. By painting all above ground facilities Juniper Green to blend with and mimic the surrounding vegetation, the level of change to the characteristic landscape would be low and the standards of the VRM II classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no additional impacts.

Mitigation: Paint all above ground facilities Juniper Green.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS) completed in June 1996. Current development, including the proposed action, has not exceeded the cumulative impacts from the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED:

Conner, Carl E.

2005 Class III Cultural Resources Inventory for Two Proposed Pipeline Routes for the CDX High Inert project (to wells: CDX Sno Grove Mesa 30-5-103 and CDX Govt Buttram #1) in Garfield County, Colorado. Grand River Institute, Grand Junction, Colorado.

Young, Robert G. Ph.D.

2005 Paleontological Investigation of the R.O.W FOR THE Proposed Pipeline for Canyon Gas Resources, Near Baxter Pass, Colorado. Dr. Robert G. Young, Geological Consultant, Grand Junction, Colorado.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility
Nate Dieterich	Hydrologist	Air Quality
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern
Tamara Meagley	Natural Resource Specialist	Threatened and Endangered Plant Species
Michael Selle	Archeologist	Cultural Resources Paleontological Resources
Robert Fowler	Rangeland Management Specialist	Invasive, Non-Native Species
Ed Hollowed	Wildlife Biologist	Migratory Birds
Ed Hollowed	Wildlife Biologist	Threatened, Endangered and Sensitive Animal Species
Bo Brown	Hazmat Collateral	Wastes, Hazardous or Solid
Nate Dieterich	Hydrologist	Water Quality, Surface and Ground Hydrology and Water Rights
Ed Hollowed	Wildlife Biologist	Wetlands and Riparian Zones
Chris Ham	Outdoor Recreation Planner	Wilderness
Nate Dieterich	Hydrologist	Soils
Robert Fowler	Rangeland Management Specialist	Vegetation
Ed Hollowed	Wildlife Biologist	Wildlife Terrestrial and Aquatic
Chris Ham	Outdoor Recreation Planner	Access and Transportation
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
Paul Daggett	Mining Engineer	Geology and Minerals
Robert Fowler	Rangeland Management Specialist	Rangeland Management
Linda L Jones	Realty Specialist	Realty Authorizations
Chris Ham	Outdoor Recreation Planner	Recreation
Keith Whitaker	Natural Resource Specialist	Visual Resources
Valerie Dobrich	Natural Resource Specialist	Wild Horses

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005-164-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analyzing the environmental effects of the proposed action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

DECISION/RATIONALE: It is my decision to authorize the construction, operation, maintenance, and termination of a buried natural gas pipeline crossing approximately 11,219 feet of public lands, from the Snow Grove Mesa 30-5-103 well to an existing Canyon Gas pipeline at Baxter Pass, as proposed and with the following mitigation:

MITIGATION MEASURES:

1. Canyon Gas must reach an agreement with the private land owner(s) along the route.
2. Colorado One Call procedure must be initiated before earth moving activities begin.
3. The applicant shall be required to collect and properly dispose of any solid wastes generated by the proposed actions
4. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as provide documentation to the BLM that they have done so prior to construction.
5. All stockpiled soils will be wetted to mitigate production of fugitive dust. Surfaces disturbed during construction will be promptly revegetated. Adequate ground cover (e.g. woody debris) must be applied immediately to minimize surface exposure to eolian processes and adequate ground cover must be immediately applied to minimize erosion. The use of biodegradable fabric (e.g. jute) may be necessary to stabilize certain areas highly susceptible to erosion.
6. The operator and contractors shall comply with “Gold Book” surface operating standards for constructing the pipeline. Flow deflectors and sediment traps (woody debris) must also be utilized in attempts to mitigate erosive potential of overland flows. The use of biodegradable fabric (e.g. jute) may be necessary to stabilize certain areas highly susceptible to erosion (e.g. locations close to NSO areas).

7. To mitigate contamination of soils and local ground water, environmentally unfriendly substances (e.g. diesel) must not be allowed to contact soils. The use of impermeable matting under equipment is suggested to intercept such contaminants prior to contacting soils.
8. Several options may be considered for treatment of slash from this project. A hydro-ax or other mulching type machine could be used to remove the trees. The machines are capable of shredding trees up to 12" in diameter and 15' tall as well as mowing brush like a conventional brush beater. It generally leaves small branches and pieces of wood from pencil size up to bowling ball size. The mulch is evenly scattered across the surface and the tires or tracks distribute the weight of the equipment. This would effectively break down the woody fuel and scatter the debris thereby eliminating any hazardous fuel load along the road and pipeline right-of-way. The other option would be to cut trees and have them chipped and scattered on the right-of-way after seeding of the disturbed areas.
9. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing **historic** or **archaeological** sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

10. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.
11. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing **paleontological**

sites, or for collecting **fossils**. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- the materials appear to be of noteworthy scientific interest
- whether the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

- The operator is responsible for maintaining the integrity of the fence when livestock are present and to repair the fence to a usable standard. The operator is to minimize open trench when livestock are present and to provide livestock crossings.
- All surfaces disturbed during construction shall be recontoured and reseeded. Successful revegetation should be achieved within three years. . The following seed mix will be used for this project. Copies of certified seed tags shall be provided to the Authorized Officer within 30 days.

Seed Mix #	Species (Variety)	Lbs PLS/ Acre	Ecological Sites
6	Basin wildrye (Magnar)	2	Foothill Swale, Sandy Swale, Swale Meadow
	Western wheatgrass (Rosanna)	3	
	Pubescent wheatgrass (Luna)	3	
	Orchardgrass (Paiute)	1	

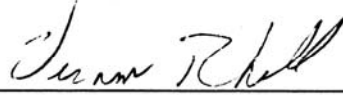
- The operator will be required to monitor the project site(s) for a minimum of three years post-construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.
- Paint all above ground facilities Juniper Green.
- Sign pipeline as “closed to motor vehicle traffic” after completion where pipeline leaves Baxter Pass.

COMPLIANCE/MONITORING: Compliance inspections will be performed by the White River Field Office staff.

NAME OF PREPARER: Linda L Jones 09/26/2005

NAME OF ENVIRONMENTAL COORDINATOR: Caroline Hollowed

SIGNATURE OF AUTHORIZED OFFICIAL:

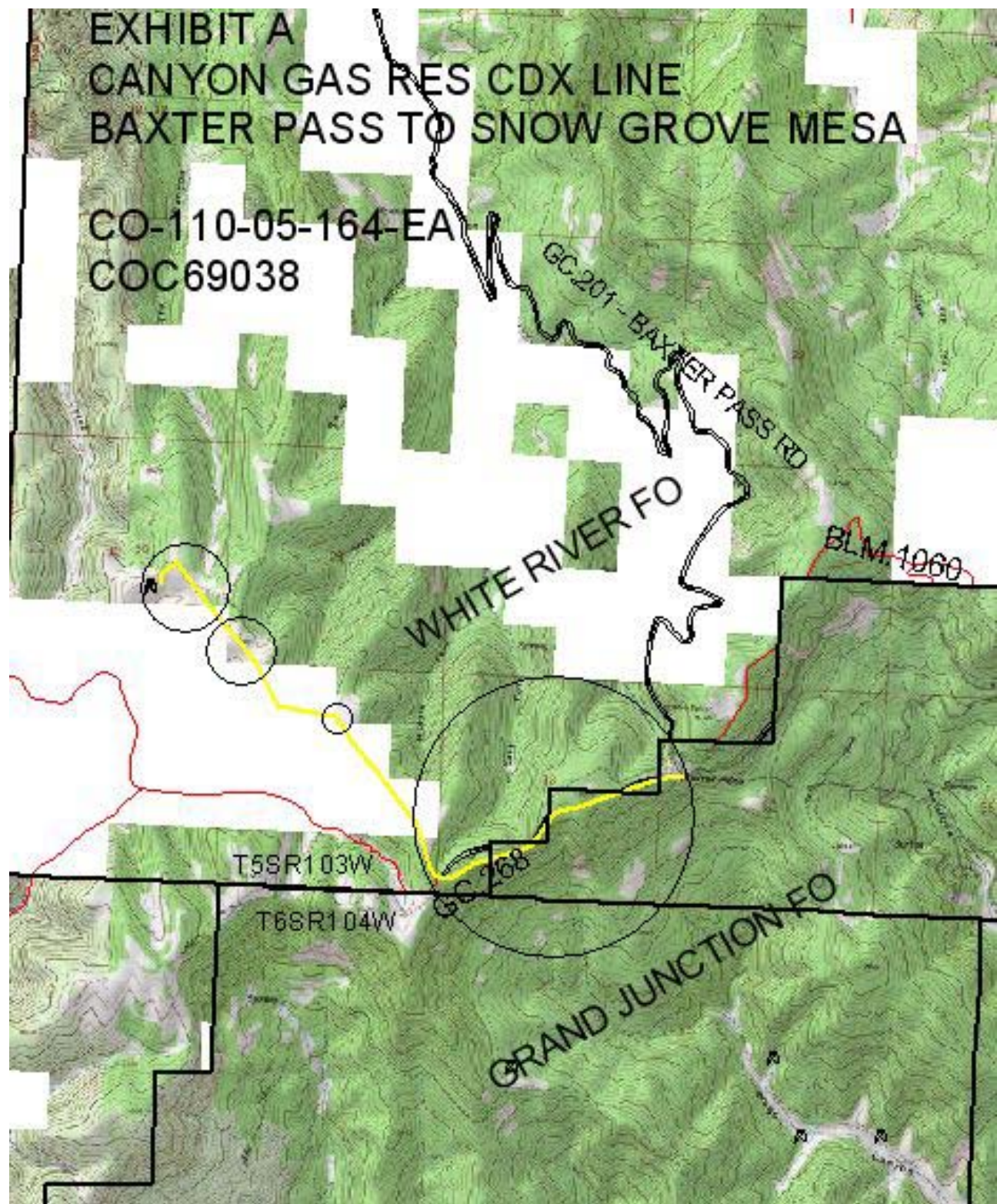


Field Manager

DATE SIGNED:

9/28/05

ATTACHMENTS: Exhibit A
Location map of the proposed action



Location of Proposed Action CO-110-2005-164-EA

